

## CHEMICAL INDUSTRY CANCERS

Chemical industry cancers are seemingly much less common than other kinds of cancer: over the course of the entire twentieth century, for example, there have been only about a thousand officially recognized cases of aniline dye bladder cancers in Germany—and aniline cancer is usually regarded as one of the more prominent occupational tumors. Numbers such as these are deceptive, however, since they include only cases recorded by factory physicians and registered with governmental health authorities. Even today, there is a great deal of debate over what proportion of cancers arise on the job, with estimates ranging from “negligible” to as many as a third of all cancers afflicting chemical industry employees.<sup>160</sup> However one plays the percentages game, the actual number of cancers is doubtless many times higher than has been recorded.<sup>161</sup>

Nazi medical interests in chemical industry cancers were often contradictory. Many health officials appear to have been genuinely worried about occupational health, but the rapid buildup of the arms industry and the single-minded focus on production eventually shifted attention away from cancer hazards. Efforts to eliminate illness turned into efforts to eliminate sick workers from the factory, from the hospital, and in certain cases from life itself. The war on disease turned into a war on the diseased. As one prominent Nazi doctor put it after the war, Nazi physicians wanted “to eliminate sickness by eliminating the sick.”<sup>162</sup> I. G. Farben’s Auschwitz plant put this into practice by never allowing more than 5 percent of its total workforce (all of whom were slave laborers) to be hospitalized at any given time. When the 5 percent figure was exceeded, camp physicians performed a selection, and the unfortunate selectees were sent to Birkenau and gassed.<sup>163</sup>

In this final section, I would like to look at one of the oldest and best-known occupational cancers: industrial bladder cancer. The malady was discovered in aniline dye workers in the 1890s by a Frankfurt surgeon—Ludwig Rehn—who had observed a disturbingly high incidence of the disease among his patients.<sup>164</sup> It is not

surprising that Germans should have made the discovery, since German chemical factories up until the First World War were producing more than 80 percent of the world’s aniline, aniline-derivatives, and aromatic amines—the crucial ingredients in synthetic dyes. Rehn had noticed three workers with the disease (in a factory with forty-five employees) some twenty years after the production of synthetic dyes had begun in earnest. Rehn himself did not draw out the point, but what soon became apparent was that cancers of this sort typically become visible ten or twenty years after the onset of exposure. Wilhelm Hueper eventually showed that bladder cancers were appearing in every nation with a synthetic dye industry, almost like clockwork.<sup>165</sup>

Germany’s 1925 ordinance governing occupational disease (the *Berufskrankheitenverordnung*) required that protective measures be adopted.<sup>166</sup> I. G. Farben that year implemented a system by which workers were required to change both before and after work to avoid bringing contaminated clothing into their homes; new production processes were also introduced to minimize human contact with carcinogens (the so-called closed system of manufacturing). These and other measures led to claims that aniline bladder cancer was “a thing of the past,” a premature boast with at best a political or public relations value.

As it turned out, German physicians actually continued to document bladder cancers throughout the 1930s. In 1938, Martin Staemmler, an influential Nazi doctor and friend of Reich Physicians’ Führer Gerhard Wagner, pointed out that there were still dye factories in Germany in which a quarter of the workforce was falling ill from the disease—a risk roughly comparable to that faced by tar workers. This was in stark contrast to official records for that year, according to which there were only twelve new occupational cancers of all kinds for the entire nation.<sup>167</sup> Wilhelm Hueper in his 1942 *Occupational Tumors* cited Staemmler’s estimate of five or six new cases of bladder cancer every year in Germany, a surprisingly high figure (in his view) for a country where the control measures were “not only the most thorough and extensive so far undertaken anywhere, but have been in operation over a longer period than in any other country.”<sup>168</sup>